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DATE MAILED: 06/29/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

41972 7590 06/29/2009

LAW OFFICES OF STUART J. FRIEDMAN 28930 RIDGE ROAD MT. AIRY. MD 21771 EXAMINER
PHAM, LUU T

ART UNIT PAPER NUMBER

2427

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/508,840 | 03/08/2005 | Christophe Genevois | 740612-187 | 9829 |

TITLE OF INVENTION: SELECTIVE MULTIMEDIA DATA ENCRYPTION

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$755 | \$300 | \$0 | \$1055 | 09/29/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | |
| 41972 7590 0629/2009 LAW OFFICES OF STUART J. FRIEDMAN 28930 RIDGE ROAD MT. AIRY, MD 21771 | | | 11 | Cer | tificate | of Mailing or Trans | |
| | | | | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO | R | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
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| nonprovisional | YES | \$755 | \$300 | \$0 | | \$1055 | 09/29/2009 |
| EXAM | INER | ART UNIT | CLASS-SUBCLASS | 7 | | | |
| PHAM, | | 2437 | 380-037000 | _ | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp | inge of Correspondence "Indication form and Use of a Custome A TO BE PRINTED O | e or agents OR, alterna | o 3 registered paten ively, gle firm (having as a agent) and the nam orneys or agents. If a e printed. ype) patent. If an assigna assignment. | memb es of u no nam | er a 2p to be is 3 | ocument has been filed for |
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| | s SMALL ENTITY state | as. See 37 CFR 1.27. | ☐ b. Applicant is no lo | | | | |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if req records of the United Sta | uired) will not be acce ites Patent and Tradem | pted from anyone other than ark Office. | the applicant; a regi | stered a | attorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | | Registration No. | | | |
| This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450. | CFR 1.311. The inform U.S.C. 122 and 37 CF USPTO. Time will v rden, should be sent to O NOT SEND FEES O | ation is required to obtain or FR 1.14. This collection is e ary depending upon the ind the Chief Information Offi PR COMPLETED FORMS | retain a benefit by the stimated to take 12 re ividual case. Any co cer, U.S. Patent and TO THIS ADDRESS | he publ minutes mment Traden i. SENI | tic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Deps D TO: Commissioner t | by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450, |

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| LAW OFFICES OF STUART J. FRIEDMAN 2890 RIDGE ROAD MT. AIRY, MD 21771 | | | PHAM, LUU T | | |
| | | | ART UNIT PAPER NUMBI | | |
| | | | 2437 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 751 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 751 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | | | |
|-----------------|----------------------|--|--|--|
| 10/508,840 | GENEVOIS, CHRISTOPHE | | | |
| Examiner | Art Unit | | | |
| IIII PHAM | 2/137 | | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1309.

- This communication is responsive to 04/15/2009 and 03/19/2009.
- The allowed claim(s) is/are 40-41, 44-45, 47-48, and 50-65.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 - 1.

 Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🗌 Other ___

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DETAILED ACTION

 An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

2. Authorization for this Examiner's Amendment was given in a telephone interview with

Applicant's representative, Mr. Stuart Friedman (Reg. No. 24,312) on June, 17 2009.

During the telephone conference, Mr. Friedman has agreed and authorized the Examiner

to amend Claims 40-65.

Claims

3. Replacing Claims 40-65 as following:

• Claim 40: (Currently amended) A conditional access method wherein digitized

multimedia data are transmitted in a continuous transport stream of successive data

packets, comprising the steps of, at the generation side:

selectively forming an encrypted transport stream from a base transport

stream by detecting particular data packets within the base transport stream, removing

and $\underline{\text{then}}$ encrypting the particular data packets with an event encryption key having a

corresponding event decryption key, and

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inserting the encrypted data packets into the remaining base transport stream at insertion positions ahead in time with respect to the original positions of the particular data packets in the base transport system, and

transmitting the event decryption key to a receiver either with the selectively encrypted data stream or via a mobile telecommunication network prior to broadcasting the multimedia data.

- Claim 41: (Currently amended) The method of claim 40, further comprising the step
 of buffering the non encrypted data packets while the particular data packets are
 encrypted.
- Claim 42: (Canceled).
- Claim 43: (Canceled).
- Claim 44: (Currently amended) The method of claim 40, comprising the step of
 transmitting the event decryption key wherein the event decryption key is transmitted
 in a Digital Video Broadcast DVB (DVB) environment in specific Entitlement
 Management Messages EMMs (EMMs) protected by a user encryption key, the
 corresponding user decryption key being provided in the Control Access System CAS
 (CAS), on a user smart card or on a user Subscriber Identification Module SIM
 (SIM).

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- <u>Claim 45</u>: (Currently amended) The method of claim 40, wherein said encrypted data
 packets are inserted at positions <u>which are</u> a predetermined number of data packets
 ahead of their respective original positions.
- Claim 46: (Canceled).
- Claim 47: (Previously presented) The method of claim 40, wherein the event decryption key is frequently changed.
- <u>Claim 48</u>: (Currently amended) The system method of claim 40, wherein the event decryption key is a fixed key distributed on a pay-per-event basis.
- Claim 49: (Canceled).
- Claim 50: (Currently amended) The method of claim 40, further comprising the step
 of providing the event decryption key which is encrypted by using a user encryption
 key, and providing a the corresponding user decryption key to an authorized user.
- Claim 51: (Currently amended) The method of claim 40, wherein the encrypting step further comprises the step of producing at a head-end encoder the selectively encrypted data stream, wherein the head-end encoder including a Common Interface Cl (Cl) that in turn has a smart card SC (SC) interface for a smart card that has encryption circuitry thereon.

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- Claim 52: (Currently amended) The method of claim 40, wherein the encrypting step
 comprises the step of producing at a head-end encoder the selectively encrypted data
 stream, wherein the head-end encoder including a Common Interface C4 (C1) for a
 Personal Computer PC (PC) card module that has encryption circuitry thereon.
- Claim 53: (Currently amended) The method of claim 40, wherein the encrypting step
 further comprises the step of producing at a head-end encoder selectively encrypted
 data stream, wherein the head-end encoder including a PG (PC) with an interface for
 a chip card containing an event encryption key or a user encryption key, the
 encryption being processed in the PC.
- Claim 54: (Currently amended) The method of claim 40, wherein the encrypting step
 further comprises the step of producing at a head-end encoder selectively encrypted
 data stream, wherein the head-end encoder including an encoder El module with a
 Common Interface and Transport Stream Cl&TS (Cl&TS) interface to a professional
 Set-Top-Box STB (STB).
- <u>Claim 55:</u> (Previously presented) The method of claim 40, wherein the base data transport stream is a clear data stream.
- Claim 56: (Previously presented) The method of claim 40, wherein the base transport stream is a DVB-scrambled data stream.

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- Claim 57: (Previously presented) The method of claim 40, wherein all data packets
 other than the selectively encrypted data packets are DVB scrambled Digital Video
 Broadcast scrambled (DVB-scrambled).
- <u>Claim 58</u>: (Previously presented) The method of claim 40, wherein every nth data packet of the transport stream is encrypted, n being a fixed number.
- Claim 59: (Previously presented) The method of claim 40, wherein every nth data
 packet of the transport stream is encrypted, n being a variable number.
- Claim 60: (Previously presented) The method of claim 59, wherein the variable number n is randomly variable.
- <u>Claim 61</u>: (Previously presented) The method of claim 59, wherein the variable number n is variable as a function of data packet contents.
- Claim 62: (Currently amended) The method of claim 40, further comprising the steps
 of, at the reception receiver side:
 - $\frac{\text{providing an receiving the}}{\text{event decryption key to }\underline{\text{by}}} \text{ an authorized}$ receiver having a conditional access system,}
 - transmitting receiving selectively the encrypted transport stream ω by the receiver,
 - detecting the encrypted data packets by the conditional access system, removing the encrypted data packets from the received transport stream,

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decrypting the encrypted data packets with the event decryption key, and

inserting the decrypted data packets into the remaining received transport

stream at positions corresponding to the respective original positions of the particular

data packets within the base transport stream.

• <u>Claim 63</u>: (Previously presented) The method of claim 62, comprising the step of

storing by the conditional access system into a buffer memory, clear data packets

while decrypting an encrypted data packet.

• <u>Claim 64</u>: (Previously presented) The method of claim 62, wherein said conditional

access system includes a chip card with decryption circuitry thereon.

• Claim 65: (Previously presented) The method of claim 64, wherein the chip card is a

Subscriber Identification Module (SIM) SIM card.

Specification

4. Amend the specification as following:

• Please insert as a centered heading, at page 1, prior to line 5:

FIELD OF THE INVENTION

• Please insert as a centered heading, at page 1, prior to line 10:

BACKGROUND OF THE INVENTION

• Please insert as a centered heading, at page 1, prior to line 19:

SUMMARY OF THE INVENTION

• Please insert as a centered heading, at page 3, prior to line 26:

BRIEF DESCRIPTION OF THE DRAWINGS

· Please insert as a centered heading, at page 4, prior to line 20:

DESCRIPTION OF THE PREFERRED EMBODIMENTS

- Page 10, line 1, please delete "Claims" and substitute CLAIMS –
- Page 17, lines 1, please delete "Abstract" add substitute ABSTRACT OF THE DISCLOSURE –

Examiner's Statement of reason of Allowance

- 5. Claims 40-41, 44-45, 47-48, and 50-65 are allowed.
- 6. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a method and system for access control of digitized multimedia data wherein a selectively encrypted transport stream is formed from a based transport stream by removing particular data packets, encrypting said particular data packets, and inserting the encrypted data packets into remaining base

transport stream at insertion positions ahead in time with respect to the original positions of the particular data packets in the base transport stream.

The closest prior art, Candelore (US 2003/0081776) is also generally directed to various aspects of selective encryption; Munger et al., ("Munger" US 6,502,135) and Yoshinari (US 6,567,471) are generally directed to various aspects of re-arrange positions of data packets/frames. However, none of Candelore, Munger, and Yoshinari teaches or suggests, alone or in combination, the particular combination of steps or elements as recited in the independent claim 40. For example, none of the cited prior art teaches or suggest the steps of "inserting the Iselectivel encrypted data packets into the remaining base transport stream at insertion positions ahead in time with respect to the original positions of the particular data packets in the base transport system:" (emphasis added). Therefore the claims are allowable over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luu Pham whose telephone number is 571-270-5002.

The examiner can normally be reached on Monday through Friday, 7:30 AM - 5:00 PM

(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Emmanuel L. Moise can be reached on 571-272-3865. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-

8300

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished applications is available through Private PAIR only. For more information

about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-

217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-9199 (IN USA

OR CANADA) or 571-272-1000.

/Lim Pham/

Examiner, Art Unit 2437

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2437